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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/293,011	04/16/1999	YVETTE MARIE GORDON	07442009001	4298

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FISH & RICHARDSON PC
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BOSTON, MA 02110

EXAMINER

SRIVASTAVA, VIVEK

ART UNIT	PAPER NUMBER
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2611

DATE MAILED: 02/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/293,011

Applicant(s)

GORDON ET AL.

Examiner

Vivek Srivastava

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 November 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 73-127 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 73-127 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 73 – 75, 77, 79 – 82, 85 – 88, 90 – 92, 100 – 102, 105 – 108, 110 – 112, 114, 119 and 120 are rejected under 35 U.S.C. 102(e) as being anticipated by Burns et al (5,991,306).

Regarding claims 73, 100 Burns discloses a system and method for delivering data over a network. In particular, Burns discloses a plurality of local servers 72 and 4 (see fig 2). Burns further discloses that each of the local servers 72 and 74 stores viewable data objects i.e. web pages and are in communication with a plurality of viewer receivers (met by subscriber PC (see fig 2). Burns further discloses a plurality of storage servers (see content server 52 in fig 2, col 5 lines 64 – 67). Each storage server being configured to store a set of viewable data objects that includes the selection of viewable data objects (see col 5 line 64 – col 6 line 65). Burns inherently discloses a content manager in communication with the storage servers and with the

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local servers, noting that a manager must inherently be included to pre-cache and store content frequently used (see col 7 lines 30 – 40 and col 8 lines 23 – 40). It is noted that the content pre-cached is based on content anticipation of expected demand for the selectable viewable data objects and that the servers are selected from the group consisting of local servers and storage servers (see col 5 line 64 – col 6 line 65). It is further noted that the pre-caching meets the claimed 'automatically managing distribution of viewable data objects among the local servers and storage servers'.

Regarding claim 74, Burns discloses moving the content from a first content server to a second local server as discussed above and thus discloses the claimed limitation.

Regarding claim 75, Burns discloses the claimed personal computer (see 'subscriber PC' – fig 2).

Regarding claim 77, Burns discloses the broadly claimed limitation. In particular, Burns discloses transferring and pre-caching frequently requested content and thus discloses tagging and pre-caching the most frequently requested content i.e. the most frequently requested content meets the claimed 'logical grouping as a single unit' limitation.

Regarding claim 79, Burns discloses that the user can send upstream requests to the local servers for delivery of content and thus discloses the claimed two-way communication with at least one viewer receiver thereby providing interactive communication (see col 7 lines 35 – 60, col 8 lines 23 – 40).

Regarding claim 80, Burns discloses the local service provider can adapt to the changing patterns of the clientele with regards to what data objects are pre-cached (see col 10 lines 37 – 41). Thus Burns discloses dynamically updating access to the viewable data object in response to an event i.e. adapting files pre-cached at the local service provider as a result of changing patterns of client selections, thus the event is detecting higher requests of a particular data object over another as a result of more client requests.

Regarding claim 81, Burns discloses pre-caching frequently requested content (basis of a property) to the local servers of the ISP (see col 7 lines 41 – 60).

Regarding claim 82, Burns discloses pre-caching frequently requested content which would inherently meet the limitation of altering the content pre-cached based on the content which actually most frequently requested.

Regarding claim 85, Burns discloses the local service provider can adapt to the often changing patterns of its clientele with respect to what object are pre-cached, and thus discloses the content manager is configured to selectively alter the property on the basis of the state of the viewable data objects i.e. based on changing request patterns, the web-pages pre-cached at the local ISP can be altered based on priority due to usage patterns (see col 10 lines 23 – 41).

Regarding claims 86 and 88, Burns discloses detecting which content is most requested and at what times and pre-caches those web pages prior to a user's request. In particular, Burns discloses pre-caching CNN's web page and thus discloses

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assigning a priority to CNN's web page for pre-caching (see col lines 11 – 35, col 7 line 30 – col 8 line 40).

Regarding claim 87, Burns discloses assigning priority of which web-pages are pre-cached to what local server based on location and demographics (see col 10 lines 23 – 36) and thus discloses the claimed limitation.

Regarding claim 90, Burns discloses pre-caching frequently requested content, it is noted that since the content is first determined to be frequently requested, the claimed 'measured popularity of the viewable data objects' is met by Burns.

Regarding claim 91, Burns discloses pre-caching files that the content manager anticipates a user will request and thus discloses the claimed wherein the property comprises anticipated popularity of the viewable data object (see col 9 lines 11 – 35, col 10 lines 10 – 47).

Regarding claim 92, Burns discloses distributing web-pages and thus discloses the claimed distributed processing system (col 5 lines 64 – col 6 lines 65).

Claims 101, 102, 105, 106, 107, 108, 110, 111, 112, 114, 119, 120 are met by that discussed above.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 76, 78, 83, 84, 89, 93 - 99, 103, 104, 109, 113, 115 - 118 and 121 - 127 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burns et al (5,991,306).

Regarding claim 76, Burns fails to disclose wherein each of the local servers is configured to detect a first viewable data object has a lower priority than a second viewable data object and deleting the first viewable data object to free space to store the second viewable data object.

The Examiner takes Official Notice detecting the priority of saved data objects or files and deleting objects of files of less priority to free up memory space is well known. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Burns to include the claimed limitation to free up memory space to make the space available for objects and files of greater priority.

Regarding claim 78, Burns fails to disclose the content manager is adapted to control work queues for video data objects stored on the local servers.

Official Notice is taken that controlling work queues for files requested provides a more organized and efficient system for controlling and delivering files. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Burns to include the claimed limitation to provide organized and efficient system for controlling and delivering files.

Regarding claims 83 and 84, Burns discloses the collection of viewer statistics at individual ISP's 56 for caching purposes, and points to changes in taste based on changes in demographics and geographical regions. However, such centralized statistical collection and programming control is well-known in the cable television art when one is concerned with the programming for a collection of cable television headends. The advantage for centralizing control over priority designations for continuous media selections is that such processing is otherwise not required at the disparate headends. Further, continuous media, as opposed to Web page media, is often uniformly liked over broad regions, and consequently lends itself to the arrangement. Therefore, the Examiner submits it would have been clearly obvious to one of ordinary skill in the art at the time the invention to modify the Burns et al system to attach a priority to continuous media based on statistical analysis of several ISPs/headends for the stated advantage.

Regarding claim 89, Burns fails to disclose the claimed wherein the property comprises revenue associated with viewing of the viewable data object.

Official Notice is taken it is well known to prioritize objects or files which are generate the most revenue since those objects and files are more popular or more frequently requested. Therefore, it would have been obvious at the time of the invention to modify Burns to include the claimed limitation provide objects or files which are more popular or frequently requested as determined by revenue to have those objects or files more readily available.

Regarding claims 93, 97 and 98, Burns fails to disclose the content manager is integrated into the storage server, wherein the content manager is in direct communication with at least one of the servers and wherein the content manager is in communication with at least one of the local servers by way of the storage server.

Official Notice is taken that integrating components results in a reduction in the quantity of components which further results in less hardware and space required. Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to integrate the content manager into the storage server to reduce the number of components in the system resulting in less space and hardware required and to facilitate direct communication to the local servers via the storage server to provide quick access and control of the local servers.

Regarding claims 94 - 96, Burns fails to disclose the claimed streaming control process, granting viewer control over the streaming of the media object on the basis of meta-data, and granting viewer control in response to instructions from the content manager.

The Burns reference is silent as to the streaming control process, yet such control is notoriously well-known in the art of video-on-demand as a mechanism for imparting VCR-like control, such as pause fast-forward and reverse, to the client server environment. It would have been clearly obvious to one of ordinary skill in the art at the time of the invention to modify the Burns system with such video stream control to make the presentation of continuous media more desirable to the user by providing enhanced interactive control.

Regarding claim 99, claim 99 recites the same limitations as discussed above and therefore rejected for the same reasoning provided above. Claim 99 further recites the viewer receivers are televisions.

Official Notice is taken PCTV are well known in the television are to enhance a viewer's viewing experience by providing a viewer with Internet programming and television programming. Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to modify Burns to include the claimed televisions to enhance a viewer's viewing experience by providing both access to the Internet and access to television programming.

Regarding claims 121 and 122, claims 121 and 122 are met by the discussions above. It is noted that the preselected event is the determination of the priority for pre-caching a given web-page from a pool of web-pages. It is further noted that the different priorities is met by prioritizing and providing different web-pages for pre-caching to different local servers based on location and demographics (see col 10 lines 23 – 28).

Regarding claims 123, Burns discloses the claimed selecting viewable data objects on the basis of operations data received from the local servers (col 4 line 56 – col 5 line 17, col 7 line 61 – col 8 line 34).

Regarding claim 124, Burns fails to disclose the claimed sending a list of available data objects to a local server and selecting viewable data objects in response to receiving the list and to priorities for data object content at the local server.

Official Notice is take providing a list of items facilitates faster and quicker selection of items since the options are readily available thereby providing a more organized system. Therefore, it would have been obvious to modify Burns to include the claimed limitation to receive the list and priorities to provide quicker selections of web-pages while also providing a more organized and better managed system.

Regarding claim 126, Burns fails to disclose the claimed transmitting meta-data to the local servers and receiving a request for a viewable data object form a viewer receiver in response to streaming a portion of the meta-data to the viewer receiver.

The Burns reference is silent as to the streaming control process, yet such control is notoriously well-known in the art of video-on-demand as a mechanism for imparting VCR-like control, such as pause fast-forward and reverse, to the client server environment. It would have been clearly obvious to one of ordinary skill in the art at the time of the invention to modify the Burns system with such video stream control to make the presentation of continuous media more desirable to the user by providing enhanced interactive control by providing meta-data to the local servers and streaming a portion of the meta-data to the viewer receiver..

Regarding claim 127, Burns fails to disclose calculating a delay at least in part on the basis of operations data from a local server and wherein transmitting viewable data objects is performed after the delay ends; and wherein the method further comprises storing a portion of the viewable data objects in storage space of a local server, the storage space having been freed at the end of the delay.

Official Notice is take that it is well known calculating a delay associated with a transmission queue and transmitting data after the delay to provide an operator or viewer with an idea of how long it will take to before transmission commences.

Official Notice is further taken that it is well known to free up memory after transmission to make space for other data. Therefore, it would have been obvious at the time of the invention to modify Burns to include the claimed limitation to provide an operator or viewer with a idea of how long it will take before transmission commences while also freeing up memory after transmission for other data.

Claim 103, 104, 109, 113, 115, 116, 117, 118, 125 is met by that discussed above.

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vivek Srivastava whose telephone number is (703) 305-4038. The examiner can normally be reached on Monday – Friday from 9 am to 6 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Grant can be reached on (703) 305-4755. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Vs
2/19/05



VIVEK SRIVASTAVA
PRIMARY EXAMINER